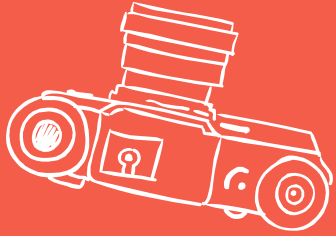# How do computers work?

What is a computer?

Computer

An electronic device for storing and processing data according to instructions given to it in a variable program.

Are these computers?

Other Examples of computers

➔ Smart watches
➔ Digital cameras
➔ Video game consoles
➔ Video game controllers
➔ Washing machines
➔ Refrigerators
➔ Coffee makers
➔ TVs
➔ TV remotes

Can you think of more?

What do computers do?

Computers process data!

Data is… information

- Numbers
- Letters
- Words
- Positions
- Size
- Weight
- Color

Can you think of more?

Data Types

- Not all data is created equal
- Some types of data are different than others

What if you asked me my name….

…and I responded with, "37"?

Data Types

Integer	Whole numbers Can be positive, negative, or zero
Float	"Floating point" numbers Decimal numbers
Character	A single character symbol
String	A group or "string" of characters
Boolean	Can only either be TRUE or FALSE

Inputs and outputs

It all starts with an input of data...

-mouse clicks

-keyboard presses

-button presses

-dials

-switches

Inputs and outputs

...and ends with an output

-screens/monitors

-speakers

-projectors

-spinning motors